IN THE CLAIMS:

Please amend claims 1, 2, 5, 8-10 and 13 as follows:

1. (Amended) A method for [manipulating] labeling genetic material, the method comprising:

a) disrupting cells so as to liberate genetic material contained in the cells;

b) contacting the genetic material to a column in a manner to cause the genetic material to become immobilized to the columm;

c) labeling the immobilized genetic material within the column; and

d) eluting the labeled material from the column.

2. (Amended) A method for manipulating genetic material, the method comprising:

a) disrupting cells so as to liberate genetic material contained in the cells;

b) contacting the genetic material to a column in a manner to cause the genetic material to become immobilized to the column;

c) labeling the immobilized genetic material; and

d) eluting the labeled material from the column. [The method as recited in 1] wherein the step of labeling the genetic material further comprises maintaining the column at a temperature of between 45 °C and 100 °C.

5. (Amended) A method for manipulating genetic material, the method comprising:

a) disrupting cells so as to liberate genetic material contained in the cells;

b) contacting the genetic material to a column in a manner to cause the genetic material to become immobilized to the column;

c) labeling the immobilized genetic material; and

d) eluting the labeled material from the column [The method as recited in claim 1] wherein the step of labeling the genetic material comprises:

[a)] e contacting double-stranded nucleic acid molecules of the genetic material with radical-generating complexes for a time and at concentrations sufficient to produce free-aldehyde moieties;

[b] f reacting the aldehyde moieties with amine to produce a condensation product; and

[c] g contacting the condensation product with a chromophore.

8. (Amended) A two-buffer process for [manipulating] labeling genetic material, the process comprising:

a) contacting cells containing the genetic material to a silica column;

b) creating a first fraction of cell detritus and a second fraction containing the genetic material;

c) confining the genetic material to the column;

d) removing the cell detritus;

e) subjecting the genetic material to radicals so as to produce reactive aldehyde groups on the genetic material; and

f) attaching chromophore to the genetic material while the material resides in the column.

9. (Amended) A two-buffer process for manipulating genetic material, the process comprising:

a) contacting cells containing the genetic material to a silica column;

b) creating a first fraction of cell detritus and a second fraction containing the genetic material;

c) confining the genetic material to the column;

d) removing the cell detritus;

e) subjecting the genetic material to radicals so as to produce reactive aldehyde groups on the genetic material; and

f) attaching chromophore to the genetic material [The process as recited in claim 8] wherein the genetic material is contacted with radical in aerobic conditions.

10. (Amended) A two-buffer process for manipulating genetic material, the process comprising:

a) contacting cells containing the genetic material to a silica column;

b) creating a first fraction of cell detritus and a second fraction containing the genetic material;

c) confining the genetic material to the column;

d) removing the cell detritus;

e) subjecting the genetic material to radicals so as to produce reactive aldehyde groups on the genetic material; and

f) attaching chromophore to the genetic material [The process as recited in claim 8] wherein the genetic material is contacted with radical in anaerobic conditions.

13. (Amended) A two-buffer process for manipulating genetic material, the process comprising:

a) contacting cells containing the genetic material to a silica column;

b) creating a first fraction of cell detritus and a second fraction containing the genetic material;

c) confining the genetic material to the column;

d) removing the cell detritus;

e) subjecting the genetic material to radicals so as to produce reactive aldehyde groups on the genetic material; and

f) attaching chromophore to the genetic material [The process as recited in claim 8] wherein the two buffers comprise a first buffer to lyse the cells and a second buffer to attach the genetic material to the column.

19. (Amended) The process as recited in claim 8 wherein the temperature is maintained at [95 °C] between 30 °C and 100 °C.

Please add the following claims:

20. The method as recited in claim 2 wherein the column comprises a means for subjecting the silica to pressure.

21. The method as recited in claim 1 wherein the step of labeling the genetic material comprises:

a) contacting nucleic acid molecules of the genetic material with radical-generating complexes for a time and at concentrations sufficient to produce free-aldehyde moieties;

b) reacting the aldehyde moieties with amine to produce a condensation product; and

c) contacting the condensation product with a chromophore.

22. The method as recited in claim 21 wherein the step of contacting the condensation product with a chromophore further comprises reducing the condensation product and cross-linking the reduced condensation product with the chromophore in one reaction step.

23. The process as recited in claim 9 wherein the genetic material is bound to chromophore in aerobic conditions.